

## ABSTRACT

The present invention is intended to provide a diagnostic method for paratuberculosis by which an animal infected with *Mycobacterium avium* subsp. *paratuberculosis* can be diagnosed at a high sensitivity in the sub-clinical infection stage before the specific antibody level begins to increase and a large number of specimens can be treated. The present invention provides: a diagnostic method for paratuberculosis characterized by collecting the blood of a subject animal, adding an anti-IL-10 antibody and a *Mycobacterium avium* subsp. *paratuberculosis* antigen to the collected blood followed by culture, and then measuring the amount of produced IFN $\gamma$  in the blood; a diagnostic method for paratuberculosis characterized in that the amount of produced IFN $\gamma$  in blood is measured by the IFN $\gamma$  ELISA method; and a diagnostic method for mycobacterial infection characterized by collecting the blood of a subject animal, adding an anti-IL-10 antibody and a mycobacterial antigen to the collected blood followed by culture, and then measuring the amount of produced IFN $\gamma$  in the blood.